From: Stephen Tzhone
To: Philip Turner: Jon Rauscher

Subject: Fwd: Re: Port of Houston Authority request for clarification regarding dioxin public announcement

Date: 08/04/2011 03:59 PM

Attachments: Answers to Sed PCL Questions.pdf

2009 11 02 Rationale Memo for USACE Permit Conditions w Atts PKT.pdf

2009 10 13 EPA to TCEQ San Jacinto permits process.pdf 2009 10 13 EPA to USACE San Jacinto permits process.pdf

2011 01 25 EPA to USACE and TCEQ. San Jacinto permits process update.pdf POHA Dioxin Public Announcment Clarification Letter 07292011 with attachment.pdf

Phil. Jon:

See next email for comments from TCEQ. Plan for Friday August 12 to complete research and any recommendations to go forward, thanks.

Thanks,

Stephen L. Tzhone Superfund Remedial Project Manager USEPA Region 6 (6SF-RA) 214.665.8409 tzhone.stephen@epa.gov

▼ "Tracie Phillips" ---08/04/2011 02:17:38 PM---Hi Luda,

From: "Tracie Phillips" < Tracie. Phillips@tceq.texas.gov>

To: "Luda Voskov" < Luda. Voskov@tceq.texas.gov>, "Sue Reilly" < Sue.Reilly@tceq.texas.gov>, Stephen Tzhone/R6/USEPA/US@EPA

Cc: "Joseph Haney" < Joseph. Haney@tceq.texas.gov>

Date: 08/04/2011 02:17 PM

Subject:

Hi Luda,

In reviewing the questionFwd: Re: Port of Houston Authority request for clarification regarding dioxin public announcement the POHA has about the permit evaluation process and dredged sediment disposal options, it appears as though the POHA is using the TCDD concentration to compare to the comparison values rather than the TEQ concentration. Upon further evaluation, I noticed that the conditions of determination, as outlined in Section II.A.5 of the Public Announcement, use 33 ppt TCDD organic carbon normalized and 0.45 ppt TCDD non-organic carbon normalized. This was not the original intent of the potential screening values developed by the TD and provided to the EPA for consideration.

The potential screening values developed by the TD used the TCDD BSAF as a conservative method to develop the screening value. However, as stated in my July 23, 2009 email (attached) to EPA and TCEQ project members, ".the TD believe comparison of the ocnormalized sample **TEQ** to the screening criterion of 33 ppt ng/kg-oc for 2,3,7,8-TCDD is likely protective for the sediment-to-fish ingestion human exposure pathway." I also stated ".the **use of a 2,3,7,8-TCDD number is appropriate when no TEQ is available**."

In the real world example given by the POHA, the TEQ is 0.678 ppt; I am going to assume this is non-organic carbon normalized based on the non-organic carbon normalized TCDD concentration given. Therefore, if the potential screening values provided by TD were used as TD intended and explained, the following would be true:

Non-organic carbon normalized

TEQ non-organic carbon normalized = 0.678 ppt, which is greater than 0.45 ppt = Condition #2, disposal in a hazardous waste landfill or upland confined disposal area

Organic carbon normalized

TEQ non-organic carbon normalized 0.678 ppt / 0.00336 (percent organic carbon) = **201.8 ppt organic carbon normalized, which is greater than 33 ppt = Condition #2**, disposal in a hazardous waste landfill or upland confined disposal area

Also, as discussed in the provided email, please keep in mind that the potential screening value developed by the TD, which was based off of the TMDL data, was 33 ppt organic carbon normalized. It was requested that the TD also provide a non-organic carbon normalized potential screening value. To accomplish this the TD back-calculated the 33 ppt ng/kg-oc using an average TOC of 1.35% (from the TMDL data) for the HSC. This calculation gives the 0.45 ppt non-organic carbon normalized value.

non-oc-normalized potential screening value = (33 ppt ng/kg-oc) * (0.0135) = 0.45 ppt

The non-organic carbon normalized potential screening value of 0.45 ppt provided by the TD is a default value based on an average %TOC for the HSC. If the %TOC is known for a specific area, then site-specific %TOC would be better for the calculation of the non-organic carbon normalized value.

<u>Site-specific for the real world example given by the POHA:</u> non-oc-normalized potential screening value = (33 ppt ng/kg-oc) * (0.00336) = **0.11 ppt**

Therefore

TEQ non-organic carbon normalized = 0.678 ppt, which is greater than 0.11 ppt (based on site-specific %TOC) = Condition #2, disposal in a hazardous waste landfill or upland confined disposal area

Please let me know if you have any questions.



Tracie

*Please note my email address has changed to tracie.phillips@tceq.texas.gov

Tracie Phillips, Ph.D. | Senior Toxicologist | TCEQ

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▼ "Luda Voskov" ---07/29/2011 04:24:18 PM--- Tracie, Sue

From: "Luda Voskov" <Luda.Voskov@tceq.texas.gov>

To: "Sue Reilly" <Sue.Reilly@tceq.texas.gov>, "Tracie Phillips" <Tracie.Phillips@tceq.texas.gov>

Cc: Stephen Tzhone/R6/USEPA/US@EPA

07/29/2011 04:24 PM

Subject: Fwd: Re: Port of Houston Authority request for clarification regarding dioxin public announcement

Tracie, Sue

please let me know if you have any comments on this request.

Thanks! Luda Voskov, P.G., Project Manager Team 2, Superfund Section Remediation Division, TCEQ Direct Line - (512) 239-6368

Fax - (512) 239-2450

e-mail: <u>luda.voskov@tceq.texas.gov</u>

▼ Stephen Tzhone---07/29/2011 12:05:39 PM---Phil, Jon, See next email and question from POHA. Any recommendations? If necessary, we can amend

Stephen Tzhone/R6/USEPA/US

To: Philip Turner/R6/USEPA/US@EPA, Jon Rauscher/R6/USEPA/US@EPA

Garyg Miller/R6/USEPA/US@EPA, Stephen Ellis <STellis@tceq.state.tx.us>, "Luda Voskov" <Luda.Voskov@tceq.texas.gov>, Jessica Hernandez/R6/USEPA/US@EPA, Carlos Sanchez/R6/USEPA/US@EPA, Sharon Parrish/R6/USEPA/US@EPA Cc:

07/29/2011 12:05 PM

Subject: Re: Port of Houston Authority request for clarification regarding dioxin public announcement

Phil, Jon,

See next email and question from POHA. Any recommendations? If necessary, we can amend the original risk assessor rationale memo and subsequent permits policy with USACE and TCEQ as well.

2009_11_02_Rationale Memo for USACE Permit Conditions w Atts_PKT.pdf

2009_10_13_EPA to TCEQ_San Jacinto permits process.pdf 2009_10_13_EPA to USACE_San Jacinto permits process.pdf

2011_01_25_EPA to USACE and TCEQ_San Jacinto permits process update.pdf

Thanks,

Stephen L. Tzhone Superfund Remedial Project Manager USEPA Region 6 (6SF-RA) 214.665.8409 tzhone.stephen@epa.gov

▼ Nicole Hausler ---07/29/2011 11:17:58 AM---Stephen and Stephen, Please find attached a letter from PHA requesting clarification on the October

Nicole Hausler < NCass@poha.com> From:

To: Stephen Ellis <STellis@tceq.state.tx.us>, Stephen Tzhone/R6/USEPA/US@EPA

Garyg Miller/R6/USEPA/US@EPA, Dana Blume <dblume@poha.com> Cc

Date: 07/29/2011 11:17 AM

Subject: Port of Houston Authority request for clarification regarding dioxin public announcement



POHA Dioxin Public Announcment Clarification Letter 07292011 with attachment.pdf

Stephen and Stephen,

Please find attached a letter from PHA requesting clarification on the October 2009 Joint Agency dredged sediment disposal options public announcement.

I look forward to your response.

Thank you, Nicole

Nicole D. Hausler

Senior Compliance Coordinator Port of Houston Authority

T: 713-670-2683 F: 713-670-2427 nhausler@poha.com www.portofhouston.com



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